

What is claimed is:

1. Portable electronic equipment comprising:

5 a first manipulator means for performing a first screen process on an information displayed on a display means;

a second manipulator means for performing a second screen process on the information; and

10 a controller means, said controller means controlling said first manipulator means, said second manipulator means, and said display means;

wherein, responsive to input from said first manipulator means, said controller means performs the first screen process of scrolling a screen displaying the information and selecting a display position; and

15 responsive to input in a circumferential direction from said second manipulator means, said controller means performs the second screen process, the second screen process being one of scaling up, scaling down, and switching the screen with the selected display position as a reference.

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2. The portable electronic equipment of Claim 1, wherein

said second manipulator means includes a ring-shaped manipulator, and

25 said first manipulator means is provided on a side of one of inner and outer circumferences of said ring-shaped manipulator.

3. The portable electronic equipment of Claim 1, wherein said second manipulator means includes a rotatable ring-shaped

manipulator, and further includes a rotation detection means for detecting a direction and amount of rotation of said second manipulator means.

5           4. The portable electronic equipment of Claim 3, wherein  
said rotation detection means is disposed on a bottom face  
of said ring-shaped manipulator;

          said rotation detection means comprises:

          a ring magnet magnetized to a north pole and a  
10   south pole alternately at intervals of an equal angle and fixed on the  
bottom face of said manipulator; and

          a pair of magnetic sensors opposed to said ring  
magnet with a predetermined clearance ; and

          said rotation detection means detects movement of said  
15   ring magnet above said magnetic sensors.

5. The portable electronic equipment of Claim 3, wherein

          said rotation detection means detects a direction and  
amount of rotation of said second manipulator means; and

20           said controller means performs a screen process, the  
screen process being one of scaling up, scaling down, and switching a  
displayed screen.

6. The portable electronic equipment of Claim 1, further  
25   comprising a circular manipulator, wherein

          said circular manipulator includes said first manipulator  
means and said second manipulator means on a bottom side thereof;  
and

said second manipulator means can detect sliding operation of said manipulator in a circumferential direction thereof, and a direction and amount of rotation of said manipulator caused by the sliding operation.

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7. The portable electronic equipment of Claim 6, wherein

said first manipulator means includes a press button and a self-restoring contact opposed to said press button; and

actuation of said self-restoring contact by said press  
10 button allows the screen on said display means to be scrolled at least vertical and horizontal directions.

8. The portable electronic equipment of Claim 6, wherein

said second manipulator means comprises:

15 a ring-shaped conductive depressing portion; and  
a plurality of concentrically disposed second contacts opposed to said depressing portion with a predetermined clearance therebetween; and

a move of said depressing portion on said second contacts  
20 is detected as a direction and amount of rotation of the sliding operation.

9. The portable electronic equipment of Claim 6, wherein

according to a detected direction and amount of rotation of  
25 the sliding operation, said controller means performs a process, the process being one of scaling up, scaling down, switching the displayed screen.

10. The portable electronic equipment of Claim 6, including said first manipulator means along an outer circumference of said second manipulator means, wherein said first manipulator means includes a conductive depressing portion and a first contact opposed to said  
5 depressing portion.

11. The portable electronic equipment of Claim 6, wherein  
said second manipulator means detects operation in a circumferential direction of said manipulator; and  
10 said first manipulator means detects operation within the same plane in a direction different from that of said second manipulator means.

12. The portable electronic equipment of Claim 6, wherein said  
15 manipulator has an indication means for indicating a position of said first manipulator means.

13. The portable electronic equipment of Claim 1, wherein said first manipulator means is a multi-directional switch operated by one of  
20 depressing and tilting.

14. The portable electronic equipment of Claim 1, wherein said first manipulator means is a track ball.

25 15. The portable electronic equipment of Claim 1 further comprising a built-in display device.